REMARKS

Claims 1-22 are pending in the Application and all were rejected in the Office Action mailed June 12, 2008. Claims 1, 16, and 22 are amended by the present response. Claims 1, 16, and 22 are independent claims. Claims 2-15 and 17-21 depend from independent claims 1 and 16, respectively.

The Applicant respectfully requests reconsideration of pending claims 1-22, in light of the following remarks.

Rejections of Claims

Claims 1-12 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Criss et al. (US 2001/0029178 A1, hereinafter "Criss") in view of Angelo et al. (US 5,974,250, hereinafter "Angelo"), and in view of Peleg (US 6,546,552, hereinafter "Peleg"). Claims 13-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Criss in view of Angelo and Peleg, and further in view of Hayes, Jr. et al. (US 5,974,312, hereinafter "Hayes"). Applicant respectfully traverses the rejections for the reasons set forth during prior prosecution, and in addition, those set forth below. For the reasons below, as well as those set forth in previous submissions, Applicant respectfully submits that the Office Action has failed to establish a *prima facie* case of obviousness, in accordance with M.P.E.P. §2142.

Applicant notes that the Office Action largely fails to address the previous arguments by the Applicant, including those in the RCE. For example, the Office Action states, "Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of new grounds of rejection." (Office Action at p. 2). Yet, in large part, the Office Action then relies on previous grounds of rejection. As Applicant has previously addressed many of these issues, the arguments in whole will not be repeated in this submission, including, for example, shortcomings in the teachings of the Criss, Angelo, and Hayes references. Applicant maintains its previous traversals of the asserted grounds of rejection, and expressly reserves its right to challenge the assertions made in the Office Action.

I. The Proposed Combination Of Criss, Angelo, and Peleg Does Not Render Claims 1-12 Unpatentable

Amended claim 1 recites a mobile services network comprising, *inter alia*, "a generator with nodes preprocessor, which generates a package of update information...wherein generating comprises predicting the contents of locations in the new version of firmware and identifying as nodes corresponding locations in an old version of firmware for the mobile electronic device and a new version of firmware for the mobile electronic device, for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware." (Support for this clarifying amendment may be found, for example, at ¶27 of the specification.)

Applicant begins by noting that the teachings of the Criss and Angelo references have been discussed in previous submissions. Applicant's review of the present Office Action did not indicate anything to materially change assertions made in previous Office Actions, or to address shortcomings of those assertions identified, for example, in the RCE. Applicant again notes that Criss does not teach, for example, at least, "wherein generating comprises identifying as nodes corresponding locations in an old version of firmware for the mobile electronic device and a new version of firmware for the mobile electronic device, for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware." Applicant understands the only new aspect of this rejection to be the citation to the Peleg reference.

Regarding Peleg, the Office Action asserts that "Peleg teaches identifying as a node a location that was not predicted (abstract, column 2 line 31 – column 3 line 20, column 14 line 33 – column 15 line 17 where Peleg teaches identifying data records and link to data records (nodes) which were not known (had not been predicted) before the updating process and noting the difference between an old version of a data structure and a new version of a data structure)." (Office Action at p. 4; emphasis added).

As an initial matter, Applicant respectfully submits that there is a significant difference between "not known" and "not predicted," and that even if, *arguendo*, Peleg

taught what the Office Action asserts it to teach (i.e. "identifying data records and link to data records (nodes) which were not known (had not been predicted)...", Peleg would still not teach, suggest, or otherwise render obvious the presently claimed subject matter, either alone or in combination with the other cited references. Claim 1, as amended by the previous submission, recites that generating comprises identifying as nodes corresponding locations in an old version of firmware for the mobile electronic device and a new version of firmware for the mobile electronic device, for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware. Thus, for example, claim 1 relates in part to contents of the location in the new version of firmware that were not able to be predicted. Applicant respectfully submits that identifying as nodes corresponding locations for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware is significantly different, and patentably distinct, from simply not knowing and/or not predicting at all (i.e. the teaching of Peleg as asserted by the Office Action). Moreover, Applicants respectfully submit that "not know[ing]" is not the same as, and does not disclose, "not predict[ing]."

In any event, as indicated above, Applicant has amended claim 1 to clarify the presently claimed subject matter, making explicit what was previously implicit in the claim -- namely, that the generating of nodes by the nodes preprocessor comprises predicting the contents of locations in the new version of firmware. Thus, amended claim 1 requires both "predicting the contents of locations in the new version of firmware" and "identifying as nodes corresponding locations...for which contents of the location in the new version of firmware was not able to be predicted based upon the old version of firmware." Thus, claim 1 relates in part to a prediction regarding the contents of a location in a new version of firmware, and the identification as nodes corresponding locations for which the prediction did not hold.

Applicant respectfully submits that the cited art references, either alone or in combination, do not teach, suggest, or otherwise render obvious such generation of nodes. For example, the Office Action states that Criss discloses "...for which contents of the location in the new version of firmware was predicted based upon the old version

of firmware (fig. 1, 5, 7: paragraphs [0052]-[0065]; Criss et al. teaches the update packages either requested by user of mobile device or by the mobile device is able to determine what filenames (nodes) it needs on the update package and whether filenames need to be deleted, added or modified." (Office Action at p. 3). While Applicants have previously addressed the shortcomings in those asserted teachings of Criss, and maintains their traversal of those asserted teachings, Applicant now notes that, even if Criss teaches what the Office Action asserts it to teach (namely, "the update packages either requested by user of mobile device or by the mobile device is able to determine what filenames (nodes) it needs on the update package and whether filenames need to be deleted, added or modified"), that such a teaching does not teach or suggest the presently claimed subject matter.

For example, the presently claimed subject matter relates to "...for which **contents** of the location in the new version of firmware was not able to be predicted..." Applicant respectfully submits that the determination of what "filenames" should be deleted, added, or modified, is quite different from, and does not teach or suggest, predicting the contents of a location in a new version of firmware. The prediction of the contents of a location in firmware is patentably distinct from a mere identification of filenames to be deleted, added, or modified. This is so regardless of whether a "filename" is somehow misconstrued as a node as claimed by the present subject matter -- the requirement "...for which contents of the location in the new version of firmware was not able to be predicted..." is explicitly recited by claim 1, as well as "...wherein generating comprises predicting the contents of locations in the new version of firmware..." The asserted "filenames" of Criss simply do not disclose a prediction of the contents of locations in the new version of firmware.

Nor does Peleg remedy that deficiency in the teachings of the asserted prior art. The first cited portion of Peleg, namely, the abstract, reads as follows:

> A method for generating a compact difference result between an old program and a new program. Each program including reference entries that contain reference that refer to other entries in the program. The method includes the steps of scanning the old program and for each reference entry perform steps that include replacing the reference of

the entry by a distinct label mark, whereby a modified old program is generated. There is further provided the step of scanning the new program and for each reference entry perform steps that include replacing the reference of the entry by a distinct label mark, whereby a modified new program is generated. There is still further provided the step of generating the specified difference result utilizing directly or indirectly the modified old program and modified new program.

Applicant respectfully submits that the above cited portion of Peleg does not teach or suggest at least the aspects of claim 1 related to the generation of nodes and the prediction of contents of a location in a new version of firmware. The second cited portion of Peleg, namely, column 2, line 31 – column 3, line 20, reads as follows:

> There follows a glossary of terms, some of which are conventional and others have been coined:
> Data Table – a table of entries, each may have a different size;
> Entry – a data fable [sic] includes entries, each of which is an addressable unit that contains data;
> Address – a number which is uniquely assigned to a single entry by which that entry is accessed; In the following description, the terms entry and address are occasionally used interchangeably.
> Reference – a part of the data appearing in an entry in the data table which is used to refer to some other entry from the same data table. A reference can be either an address or a number used to compute an address. Entries that include references are designated also as reference entries.
> Label – an abstract notation of an entry which is referred by another entry of the same data table through a reference;
> Old Data Table – a data table (or portion of a data table) that is to be updated (possibly from remote site) so as to generate a new data table (or portion of a new data table). Insofar as remote update is concerned, it is normally, although not necessarily, transmitted through a communication network such as the Internet. It should be noted that whilst for convenience of explanation only, the description focuses predominately on the Internet, the invention is by no means bound by this specific example.

As an example, a data table can be an executable program either as a loaded program in machine-memory or as an executable-file. In this example, entries are individual machine instructions of the program or the individual data elements used by the program.

Instruction and data elements of a program may contain addresses to other instructions or data elements and are regarded as references. Such references can be detected by a process of disassembly applied on the program or, if given, by analyzing a relocation table attached to executable programs by link-editors that create them.

Another example of a data table is a group of inter-linked data records stored in an array of bytes where records contain addresses of other data records. The format of the records and the way they are laid out in the array are known, and the analysis and decomposition of such array is possible.

Old program – an example of old data table: a program (or portion of a program) that is to be updated so as to generate a new program (or portion of a program).

It should be further noted that reference to the old program and the new program is made for convenience of explanation only, and encompasses inter alia the upgrade of the old program to the new program (e.g. due to an upgrade in versions), modifications of the old program to the new program, (e.g. due to corrections of bugs in the old program), and changing from a first old program to a second (and possibly different) new program[.]

Applicant further respectfully submits that this above cited portion of Peleg, directed to defining certain terminology to be used in the Peleg disclosure, does not teach or suggest at least the aspects of claim 1 related to the generation of nodes and the prediction of contents of a location in a new version of firmware. The third cited portion of Peleg, namely column 14, line 33 – column 15 line 17, reads as follows:

Bearing this in mind, attention id directed to FIG. 3A. the graph (300) represent an (old version of an) abstract data structure in the form of a graph (which is applicable in many applications as will be explained in greater details below). The nodes A-E represent data-records and the links represent references to other data-records. In this example, the pre-defined order for the data records is an alphabetical

sort of records' names. The storage of the graph would appear as:

1. A, 2, 4
2. B, 3
3. C, 4, 5
4. D
5. E, 2

Thus, for example, data-record A (301), having address 1, is linked by means of links (302 and 303) that stand for references 2 and 4 respectively, to data-records B ad[sic] D (304 and 305). As shown above, B and D reside in addresses 2 and 4 respectively.

Should it now be required to modify the above graph by adding a data-record named ABA (306 in FIG. 3B) that is linked by means of link (307) to data-record D (305), this would bring about the following new graph storage, where ABA is inserted in accordance with the said alphabetical order:

1. A, 3, 5
2. ABA, 5
3. B, 4
4. C, 5, 6
5. D
6. E, 3

It is accordingly appreciated that insertion of only one data-record gave rise to fairly large differences between the storage of the old and the storage of the new graphs.

It is readily appreciated that the above abstract data structure is similar to a computer program, except for the fact that in the specified data structure, alphabetical order is imposed as compared to a computer program, where the order of execution is imposed.

Accordingly, applying the technique described in detail with reference to FIGS. 1 and 2 above would give rise to an extraction of compact differences.

As specified above, the data table is by no means bound to the representation of a computer program. Thus, by way of non-limiting example, the specified graph (300) represents a map where nodes stand for cities and links for roads linking the various cities. The technique of the invention would allow for compact representation of topographical modification in the map (e.g. in response to the construction of a new road between the City having the symbol ABA and the city having the symbol D).

Again, Applicant respectfully submits that this above cited portion of Peleg does not teach or suggest at least the aspects of claim 1 related to the generation of nodes and the prediction of contents of a location in a new version of firmware. For example, the "links" between data records of a graph or map would be to parts of the same graph or map, and not between old and new versions of firmware. In any event, even if the "links" to Peleg could be understood as between old and new versions of firmware, Peleg still would not teach or disclose the prediction of contents of a location of firmware as claimed in the presently claimed subject matter, as "not knowing" does not disclose "not able to be predicted," as discussed above. Further, amended claim 1 also explicitly recites "...wherein generating comprises predicting the contents of locations in the new version of firmware...", and the cited portions of Peleg fail to disclose such a prediction. The cited portions of Peleg are silent with regard to, for example, the above discussed aspects of the presently claimed subject matter regarding the prediction of contents and the determining of nodes.

Moreover, Applicant respectfully submits that one skilled in the art would not be motivated to combine Criss, Angelo, and Peleg to arrive at the presently claimed subject matter as asserted by the Office Action. For example, the Office Action asserts that Criss teaches wherein "generating comprises identifying as nodes...corresponding locations...for which contents of the location in the new version of firmware was predicted based upon the old version of firmware." (Office Action at p. 3; emphasis added.) The Office Action also asserts that Peleg "teaches identifying data records and link to data records (nodes) which were not known (had not been predicted)..." (*Id.* at p. 4; emphasis added.) In short, the Office Action asserts that Criss teaches identifying nodes for locations that were predicted, and Peleg as teaching identifying nodes for locations that were not predicted, with the result that, in the combination as proposed and asserted by the Office Action, each and every location would be identified (regardless of whether predicted or not) as a node, which would not result in the "minimizing the size of the update package" offered by the Office Action as a motivation for combining Criss, Angelo, and Peleg. (*See id.* at p. 4.) Further, as pointed out in previous submissions by Applicants, the asserted "nodes" of the various pieces of cited

art are inconsistent and do not match up, providing another reason why one skilled in the art would not be motivated to combine the references to arrive at the presently claimed subject matter (assuming, *arguendo*, that the references even teach all of the limitations of the presently claimed subject matter; which, as Applicants have demonstrated above and in previous submissions, the references do not).

Based at least upon the above, Applicant respectfully submits that the proposed combination of Criss, Angelo, and Peleg fails to teach or suggest each and every limitation of Applicant's amended claim 1, that the Office has failed to establish a *prima facie* case of obviousness, and that a rejection of amended claim 1 under 35 U.S.C. §103(a) cannot be maintained.

Therefore, Applicant believes that amended claim 1 is allowable over the proposed combination of Criss and Angelo, for at least the reasons set forth above. Applicant respectfully submits that claims 2-15 depend either directly or indirectly from claim 1 and that claims 2-15 are also allowable, for at least the same reasons. Accordingly, Applicant respectfully requests that the rejection of claims 1-12 under 35 U.S.C. §103(a) be reconsidered and withdrawn.

II. The Proposed Combination Of Criss, Angelo, Peleg, And Hayes Does Not Render Claims 13-15 Unpatentable

Applicant respectfully submits that claims 13-15 depend from allowable claim 1. Applicant believes that amended claim 1 is allowable over the proposed combination of Criss, Angelo, Peleg, and Hayes, as Hayes does not overcome the shortcomings of the cited are set forth above. Applicant respectfully submits that because claim 1 is allowable over the proposed combination of references, dependent claims 13-15 are also allowable, for at least the same reasons. Therefore, Applicant respectfully requests that the rejection of claims 13-15 under 35 U.S.C. 103(a) be reconsidered and withdrawn.

III. The Proposed Combination Of Criss, Angelo, Peleg, And Hayes Does Not Render Claims 16-22 Unpatentable

With regard to amended independent claims 16 and 22, Applicant respectfully submits that claims 16 and 22 recite limitations similar to those of amended claim 1, and have been amended similarly to recite "...predicting the contents of locations in the new version of firmware..." Applicant respectfully submits that Hayes does not remedy the shortcomings of the cited art, set forth above. Therefore, Applicant believes that claims 16 and 22 are allowable over the proposed combination of references, for at least the reasons set forth above. Because claims 17-21 depend from claim 16, Applicant respectfully submits that claims 17-21 are also allowable, for at least the same reasons.

With further respect to independent claim 16, Applicant submits that claim 16 is further allowable because the cited art does not teach, suggest, or otherwise render obvious a method for generating an update package including, *inter alia*, "generating filter information." Applicant has reviewed the Office Action's reasoning for rejecting claim 16 (*see* p. 7-8 of the Office Action), and is unable to locate any assertion or explanation of prior art disclosing this aspect of claim 16. As such, Applicant respectfully submits that this is another reason that the Office Action has not presented a *prima facie* case of obviousness.

In any event, Applicant has further added a clarifying amendment to claim 16 clarifying that "...wherein generating filter information comprises capturing information regarding addresses where the contents of the location in the new image of firmware was able to be predicted." (Support for this amendment may be found at, for example, ¶27 of the specification.) Applicant respectfully submits that the cited art does not teach determining a list of nodes and generating filter information as claimed by claim 16. For example, the Office Action's assertion regarding the teachings of Criss as "identifying as nodes (filenames) corresponding locations...for which contents of the location in the new version of firmware was predicted..." would teach against the presently claimed subject matter's recitation of "generating filter information comprises capturing information regarding addresses where the contents of the location in the new image of firmware was able to be predicted", as the asserted teachings of Criss would teach

identifying such information as nodes, not filter information. The asserted combination of the Office Action would identify locations that were predicted (as well as locations that were not predicted) as nodes, instead of teaching, suggesting, or otherwise rendering obvious wherein "generating filter information comprises capturing information regarding addresses where the contents of the location in the new image of firmware was able to be predicted" as required by claim 16.

With further respect to independent claim 22, Applicant respectfully submits that claim 22 is further allowable because the cited art does not teach, suggest, or otherwise render obvious a method for generating an update package including, *inter alia*, "generating information for a first filter", "creating a partially modified old image of the firmware utilizing the first filter", and "generating information for a second filter." Applicant has reviewed the Office Action's reasoning for rejecting claim 22 (*see* p. 8-9 of the Office Action), and is unable to locate any assertion or explanation of prior art disclosing those aspect of claim 22. As such, Applicant respectfully submits that this is another reason that the Office Action has not presented a *prima facie* case of obviousness for claim 22.

Accordingly, Applicant respectfully requests that the rejections of claims 16-22 be reconsidered and withdrawn.

Conclusion

In general, the Office action makes various statements regarding the claims and the cited reference that are now moot in light of the above. Thus, Applicant will not address such statements at the present time. However, Applicant expressly reserves the right to challenge such statements in the future should the need arise (e.g., if such statements should become relevant by appearing in a rejection of any current or future claim).

The Applicant believes that all of pending claims 1-22 are in condition for allowance. Should the Examiner disagree or have any questions regarding this submission, the Applicant invites the Examiner to telephone the undersigned at (312) 775-8000.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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